Contacts: **Leiv Lea**
Pharmacyclics, Inc.
(408) 774-0330
Carolyn Bumgardner
WeissCom Partners
(415) 362-5018

PHARMACYCLICS ANNOUNCES INITIATION OF A PHASE 2 CLINICAL TRIAL OF SINGLE AGENT XCYTRIN IN RECURRENT LOW-GRADE NON-HODGKIN'S LYMPHOMA

Sunnyvale, Calif., -- June 16, 2004 -- Pharmacyclics, Inc. (Nasdaq: PCYC) today announced that it is enrolling patients in a multicenter Phase 2 clinical trial of Xcytrin® (motexafin gadolinium) Injection, the company's lead cancer therapeutic candidate, for the treatment of patients with recurrent low-grade non-Hodgkin's lymphoma (NHL).

The Phase 2 trial will study the efficacy and safety of Xcytrin used as a single agent in 35-40 patients with low-grade NHL who experienced relapse after prior therapy with Rituxan®, a common therapy for CD20-positive B-cell NHL. Patients will receive Xcytrin given intravenously daily for three days every two weeks until disease progression.

"We are eager to evaluate the response rate of Xcytrin as a single agent for treatment of relapsed low-grade non-Hodgkin's lymphoma," said Brad S. Kahl, M.D., Director of the Lymphoma Service, University of Wisconsin Hospital and Clinics, Madison, WI, and principal investigator of the clinical trial. "Xcytrin's novel mechanism of action and lack of blood count suppression make it an attractive, potentially promising therapeutic for NHL."

Xcytrin, an anti-cancer agent with a unique mechanism of action, selectively concentrates

in tumors and induces apoptosis (programmed cell death) of tumor cells. Preclinical studies indicate that Xcytrin inhibits growth of tumor cells, is cytotoxic to tumor cells including cultures of various lymphoma cell lines, and also enhances the cytotoxic activity of selected chemotherapeutics and targeted biologic agents.

“We continue to expand clinical trials evaluating Xcytrin as a single agent for treating various cancers including NHL,” said Richard A. Miller, M.D., president and chief executive officer of Pharmacyclics. “This approach builds on preclinical and early clinical data indicating that Xcytrin is active in hematological malignancies.”

Currently, Xcytrin is being investigated in a randomized Phase 3 clinical trial designed to compare the effects of whole brain radiation therapy (WBRT) alone to that of WBRT plus Xcytrin for the treatment of brain metastases (cancer that has spread to the brain from another part of the body) in patients suffering from non-small cell lung cancer (NSCLC).

About Non-Hodgkin’s Lymphoma (NHL)

Non-Hodgkin’s lymphomas are tumors derived from lymphoid cells. At disease presentation, non-Hodgkin’s lymphoma (NHL) usually is widely disseminated, commonly involving multiple lymph node sites, the bone marrow, and other organs. An estimated 54,000 patients will be diagnosed with NHL in the U.S. in 2004, according to the American Cancer Society. Although NHL patients often respond to initial chemotherapy, most patients with relapsed low grade B-cell NHL are not cured with existing treatments.

About Xcytrin

Pharmacyclics has been granted Fast-Track status by the U.S. Food and Drug Administration (FDA) for Xcytrin for the treatment of brain metastases in NSCLC patients. Also, Xcytrin is being evaluated in several Phase 1 and Phase 2 clinical trials to

measure its efficacy as a single agent and in combination with chemotherapy and/or radiation therapy for various cancers.

About Pharmacyclics

Pharmacyclics is a pharmaceutical company developing innovative products to treat cancer and atherosclerosis. The company's products are rationally designed, ring-shaped small molecules called texaphyrins that selectively target and disrupt the bioenergetic processes of diseased cells, such as cancer cells and atherosclerotic plaque.

NOTE: Other than statements of historical fact, the statements made in this press release about enrollment plans for our clinical trials, progress of and reports of results from preclinical and clinical studies, clinical development plans and product development activities are forward-looking statements, as defined in the Private Securities Litigation Reform Act of 1995. The words "believe," "will," "continue," "plan," "expect," "intend," "anticipate," variations of such words, and similar expressions also identify forward-looking statements, but their absence does not mean that the statement is not forward-looking. The forward-looking statements are not guarantees of future performance and are subject to risks and uncertainties that may cause actual results to differ materially from those in the forward-looking statements. Factors that could affect actual results include risks associated with the initiation, timing, design, enrollment and cost of clinical trials; the fact that data from preclinical studies may not necessarily be indicative of future clinical trial results; our ability to establish successful partnerships and collaborations with third parties; the regulatory approval process in the United States and other countries; and future capital requirements. For further information about these risks and other factors that may affect the actual results achieved by Pharmacyclics, please see the company's reports as filed with the U.S. Securities and Exchange Commission from time to time, including but not limited to its quarterly report on Form 10-Q for the period ended March 31, 2004. Forward-looking statements contained in this announcement are made as of this date, and we undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise.

###